



SEQUENCE LISTING

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<120> Anti-angiogenic vaccines: substances and methods
relating thereto

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<140> US 09/623,063

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<150> PCT/GB99/00583

<151> 1999-02-26

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<151> 1998-02-26

<160> 17

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<212> PRT

<213> Homo Sapiens

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Pro Leu Val Ser Asp Ala Glu Thr Ser Leu Thr Cys Ile Ala Ser Gly
35 40 45

Trp Arg Pro His Glu Pro Ile Thr Ile Gly Arg Asp Phe Glu Ala Leu
50 55 60

Met Asn Gln His Gln Asp Pro Leu Glu Val Thr Gln Asp Val Thr Arg
65 70 75 80

Glu Trp Ala Lys Lys Val Val Trp Lys Arg Glu Lys Ala Ser Lys Ile
85 90 95

Asn Gly Ala Tyr Phe Cys Glu Gly Arg Val Arg Gly Glu Ala Ile Arg
100 105 110

Ile Arg Thr Met Lys Met Arg Gln Gln Ala Ser Phe Leu Pro Ala Thr
115 120 125

Leu Thr Met Thr Val Asp Lys Gly Asp Asn Val Asn Ile Ser Phe Lys
130 135 140

Lys Val Leu Ile Lys Glu Glu Asp Ala Val Ile Tyr Lys Asn Gly Ser
145 150 155 160

Phe Ile His Ser Val Pro Arg His Glu Val Pro Asp Ile Leu Glu Val
165 170 175

His Leu Pro His Ala Gln Pro Gln Asp Ala Gly Val Tyr Ser Ala Arg
 180 185 190
 Tyr Ile Gly Gly Asn Leu Phe Thr Ser Ala Phe Thr Arg Leu Ile Val
 195 200 205
 Arg Arg Cys Glu Ala Gln Lys Trp Gly Pro Glu Cys Asn His Leu Cys
 210 215 220
 Thr Ala Cys Met Asn Asn Gly Val Cys His Glu Asp Thr Gly Glu Cys
 225 230 235 240
 Ile Cys Pro Pro Gly Phe Met Gly Arg Thr Cys Glu Lys Ala Cys Glu
 245 250 255
 Leu His Thr Phe Gly Arg Thr Cys Lys Glu Arg Cys Ser Gly Gln Glu
 260 265 270
 Gly Cys Lys Ser Tyr Val Phe Cys Leu Pro Asp Pro Tyr Gly Cys Ser
 275 280 285
 Cys Ala Thr Gly Trp Lys Gly Leu Gln Cys Asn Glu Ala Cys His Pro
 290 295 300
 Gly Phe Tyr Gly Pro Asp Cys Lys Leu Arg Cys Ser Cys Asn Asn Gly
 305 310 315 320
 Glu Met Cys Asp Arg Phe Gln Gly Cys Leu Cys Ser Pro Gly Trp Gln
 325 330 335
 Gly Leu Gln Cys Glu Arg Glu Gly Ile Pro Arg Met Thr Pro Lys Ile
 340 345 350
 Val Asp Leu Pro Asp His Ile Glu Val Asn Ser Gly Lys Phe Asn Pro
 355 360 365
 Ile Cys Lys Ala Ser Gly Trp Pro Leu Pro Thr Asn Glu Glu Met Thr
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 Asn Ala Pro Asn Val Ile Asp Thr Gly His Asn Phe Ala Val Ile Asn
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 Ile Ser Ser Glu Pro Tyr Phe Gly Asp Gly Pro Ile Lys Ser Lys Lys
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 565 570 575
 Glu Val Glu Arg Arg Ser Val Gln Lys Ser Asp Gln Gln Asn Ile Lys
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 Val Pro Gly Asn Leu Thr Ser Val Leu Leu Asn Asn Leu His Pro Arg
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 Glu Gln Tyr Val Val Arg Ala Arg Val Asn Thr Lys Ala Gln Gly Glu
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 Gln Pro Glu Asn Ile Lys Ile Ser Asn Ile Thr His Ser Ser Ala Val
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 Arg Tyr Lys Val Gln Gly Lys Asn Glu Asp Gln His Val Asp Val Lys
 675 680 685
 Ile Lys Asn Ala Thr Ile Ile Gln Tyr Gln Leu Lys Gly Leu Glu Pro
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 725 730 735
 Ala Pro Ala Asp Leu Gly Gly Gly Lys Met Leu Leu Ile Ala Ile Leu
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 Gly Ser Ala Gly Met Thr Cys Leu Thr Val Leu Leu Ala Phe Leu Ile
 755 760 765
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 805 810 815
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 820 825 830
 Gly Asn Phe Gly Gln Val Leu Lys Ala Arg Ile Lys Lys Asp Gly Leu
 835 840 845
 Arg Met Asp Ala Ala Ile Lys Arg Met Lys Glu Tyr Ala Ser Lys Asp

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Asp 865	His	Arg	Asp	Phe	Ala	Gly	Glu	Leu	Glu	Val	Leu	Cys	Lys	Leu	Gly 880
His	His	Pro	Asn	Ile 885	Ile	Asn	Leu	Leu	Gly 890	Ala	Cys	Glu	His	Arg 895	Gly
Tyr	Leu	Tyr	Leu 900	Ala	Ile	Glu	Tyr	Ala 905	Pro	His	Gly	Asn	Leu 910	Leu	Asp
Phe	Leu	Arg 915	Lys	Ser	Arg	Val	Leu 920	Glu	Thr	Asp	Pro	Ala 925	Phe	Ala	Ile
Ala	Asn 930	Ser	Thr	Ala	Ser	Thr 935	Leu	Ser	Ser	Gln	Gln 940	Leu	Leu	His	Phe
Ala 945	Ala	Asp	Val	Ala	Arg 950	Gly	Met	Asp	Tyr	Leu 955	Ser	Gln	Lys	Gln	Phe 960
Ile	His	Arg	Asp	Leu 965	Ala	Ala	Arg	Asn	Ile 970	Leu	Val	Gly	Glu	Asn 975	Tyr
Val	Ala	Lys	Ile 980	Ala	Asp	Phe	Gly	Leu 985	Ser	Arg	Gly	Gln	Glu 990	Val	Tyr
Val	Lys	Lys 995	Thr	Met	Gly	Arg	Leu 1000	Pro	Val	Arg	Trp	Met 1005	Ala	Ile	Glu
Ser 1010	Leu	Asn	Tyr	Ser	Val	Tyr 1015	Thr	Thr	Asn	Ser	Asp 1020	Val	Trp	Ser	Tyr
Gly 1025	Val	Leu	Leu	Trp	Glu 1030	Ile	Val	Ser	Leu	Gly 1035	Gly	Thr	Pro	Tyr	Cys 1040
Gly	Met	Thr	Cys	Ala	Glu	Leu	Tyr	Glu	Lys 1050	Leu	Pro	Gln	Gly	Tyr 1055	Arg
Leu	Glu	Lys 1060	Pro	Leu	Asn	Cys	Asp	Asp	Glu 1065	Val	Tyr	Asp 1070	Leu	Met	Arg
Gln	Cys	Trp 1075	Arg	Glu	Lys	Pro	Tyr 1080	Glu	Arg	Pro	Ser	Phe 1085	Ala	Gln	Ile
Leu 1090	Val	Ser	Leu	Asn	Arg	Met 1095	Leu	Glu	Glu	Arg	Lys 1100	Thr	Tyr	Val	Asn
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 35 40 45
 Gly Ala Gly Arg Gly Ser Asp Ala Trp Gly Pro Pro Leu Leu Leu Glu
 50 55 60
 Lys Asp Asp Arg Ile Val Arg Thr Pro Pro Gly Pro Pro Leu Arg Leu
 65 70 75 80
 Ala Arg Asn Gly Ser His Gln Val Thr Leu Arg Gly Phe Ser Lys Pro
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 Ser Asp Leu Val Gly Val Phe Ser Cys Val Gly Gly Ala Gly Ala Arg
 100 105 110
 Arg Thr Arg Val Ile Tyr Val His Asn Ser Pro Gly Ala His Leu Leu
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 Pro Asp Lys Val Thr His Thr Val Asn Lys Gly Asp Thr Ala Val Leu
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 Asp Gly Glu Cys Val Cys Pro Pro Gly Phe Thr Gly Thr Arg Cys Glu
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 565 570 575
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 Cys Thr Leu Leu Gly Pro Ala Ser Pro Pro Ala His Val Leu Leu Pro
 625 630 635 640
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 645 650 655
 Asp Ser Glu Ile Gln Leu Thr Trp Lys His Pro Glu Ala Leu Pro Gly
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 675 680 685
 Asp Pro Leu Trp Ile Asp Val Asp Arg Pro Glu Glu Thr Ser Thr Ile

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Leu	Gly	Asn	Gly	Leu	Gln	Ala	Glu	Gly	Pro	Val	Gln	Glu	Ser	Arg	Ala
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Ala	Glu	Glu	Gly	Leu	Asp	Gln	Gln	Leu	Ile	Leu	Ala	Val	Val	Gly	Ser
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785					790					795					800
Ser	Gly	Ser	Gly	Glu	Glu	Thr	Ile	Leu	Gln	Phe	Ser	Ser	Gly	Thr	Leu
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Thr	Leu	Thr	Arg	Arg	Pro	Lys	Leu	Gln	Pro	Glu	Pro	Leu	Ser	Tyr	Pro
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Val	Leu	Glu	Trp	Glu	Asp	Ile	Thr	Phe	Glu	Asp	Leu	Ile	Gly	Glu	Gly
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Asn	Phe	Gly	Gln	Val	Ile	Arg	Ala	Met	Ile	Lys	Lys	Asp	Gly	Leu	Lys
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Met	Asn	Ala	Ala	Ile	Lys	Met	Leu	Lys	Glu	Tyr	Ala	Ser	Glu	Asn	Asp
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His	Arg	Asp	Phe	Ala	Gly	Glu	Leu	Glu	Val	Leu	Cys	Lys	Leu	Gly	His
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Leu	Tyr	Ile	Ala	Ile	Glu	Tyr	Ala	Pro	Tyr	Gly	Asn	Leu	Leu	Asp	Phe
			915				920					925			
Leu	Arg	Lys	Ser	Arg	Val	Leu	Glu	Thr	Asp	Pro	Ala	Phe	Ala	Arg	Glu
			930				935					940			
His	Gly	Thr	Ala	Ser	Thr	Leu	Ser	Ser	Arg	Gln	Leu	Leu	Arg	Phe	Ala
945					950					955				960	
Ser	Asp	Ala	Ala	Asn	Gly	Met	Gln	Tyr	Leu	Ser	Glu	Lys	Gln	Phe	Ile
			965						970					975	
His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Val	Leu	Val	Gly	Glu	Asn	Leu	Ala
			980					985					990		
Ser	Lys	Ile	Ala	Asp	Phe	Gly	Leu	Ser	Arg	Gly	Glu	Glu	Val	Tyr	Val
			995				1000					1005			
Lys	Lys	Thr	Met	Gly	Arg	Leu	Pro	Val	Arg	Trp	Met	Ala	Ile	Glu	Ser
1010						1015					1020				
Leu	Asn	Tyr	Ser	Val	Tyr	Thr	Thr	Lys	Ser	Asp	Val	Trp	Ser	Phe	Gly
1025					1030					1035				1040	

Val Leu Leu Trp Glu Ile Val Ser Leu Gly Gly Thr Pro Tyr Cys Gly
 1045 1050 1055
 Met Thr Cys Ala Glu Leu Tyr Glu Lys Leu Pro Gln Gly Tyr Arg Met
 1060 1065 1070
 Glu Gln Pro Arg Asn Cys Asp Asp Glu Val Tyr Glu Leu Met Arg Gln
 1075 1080 1085
 Cys Trp Arg Asp Arg Pro Tyr Glu Arg Pro Pro Phe Ala Gln Ile Ala
 1090 1095 1100
 Leu Gln Leu Gly Arg Met Leu Glu Ala Arg Lys Ala Tyr Val Asn Met
 1105 1110 1115 1120
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 1125 1130 1135
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